

Applicants hereby submit a version with markings to show changes made:

- 1) [A process for testing genomic DNA for detecting if at least one base is present, whether inherited or not inherited, comprising:
  - a) making a solution comprising the genomic DNA;
  - b) adding a primer that hybridizes to a targeted section of the genomic DNA wherein a base at or within 3 bases of the primer 3' end will hybridize and extend along the genomic DNA if the base is present and will not hybridize if the base is not present;
  - c) mixing a DNA polymerase into the solution;
  - d) amplifying the targeted section of the genomic DNA if the base at or within 3 bases of the primer 3' end hybridizes;
  - e) capturing amplified polynucleotide strands to a solid support wherein the solid support contains probes sequenced to hybridize to amplified product having the base but to not hybridize if the base is not present; and,
  - f) detecting amplified polynucleotide strands if the base is present and non-detection of polynucleotide strands if the base is not present.]

A process for testing genomic DNA to determine if at least one base is present, comprising:

- a. making a solution comprising the genomic DNA;
- b. adding a primer that hybridizes to a targeted sequence of the genomic DNA wherein the primer 3' nucleotide will hybridize and extend along the genomic DNA if the base is present;
- c. mixing a DNA polymerase into the solution;
- d. amplifying the targeted sequence of the genomic DNA if the base is present;
- e. capturing amplified sequence to a solid support wherein the solid support contains probes that hybridize to amplified product having the base; and,
- f. detecting amplified targeted sequence if the base is present.

- 13) [A process for detecting a base in a targeted section of genomic DNA, whether inherited or not inherited, comprising:
  - a) obtaining the genomic DNA;
  - b) mixing the genomic DNA with a primer that hybridizes to the targeted section of the genomic DNA wherein a base at or within 3 bases of the primer 3' end hybridizes to the genomic DNA if the base is present;
  - c) amplifying the targeted section of the genomic DNA if the base at or within 3 bases of the primer 3' end hybridizes;
  - d) capturing amplified polynucleotide strands to a solid support wherein the solid support contains probes sequenced to hybridize to amplified product having the base but to not hybridize if the base is not present; and,
  - e) detecting amplified polynucleotide strands if the base is present.]

A process for detecting a base in a targeted sequence of genomic DNA, comprising:

- a. obtaining the genomic DNA;

- b. mixing the genomic DNA with a primer that hybridizes to the targeted sequence of the genomic DNA wherein the primer 3' end nucleotide hybridizes to the genomic DNA if the base is present;
- c. amplifying the targeted sequence of the genomic DNA if the base is present;
- d. capturing amplified polynucleotide strands to a solid support wherein the solid support contains probes that hybridize to amplified product having the base; and,
- e. detecting amplified targeted sequence if the base is present.